DOCUMENT RESUME

ED 070 212 EC 050 205

TITLE	A Guide for the Management of Special Education Programs. 1.0 A Program Management System.
INSTITUTION	Santa Cruz County Superintendent of Schools, Calif.
PUB DATE	72
NOTE	40p.
EDRS PRICE	MF-$0.65 HC-$3.29
DESCRIPTORS	*Administration; Educational Accountability; Educational Objectives; *Educational Programs; *Exceptional Child Education; Guidelines; *Handicapped Children; Staff Role; *Task Analysis; Task Performance

ABSTRACT

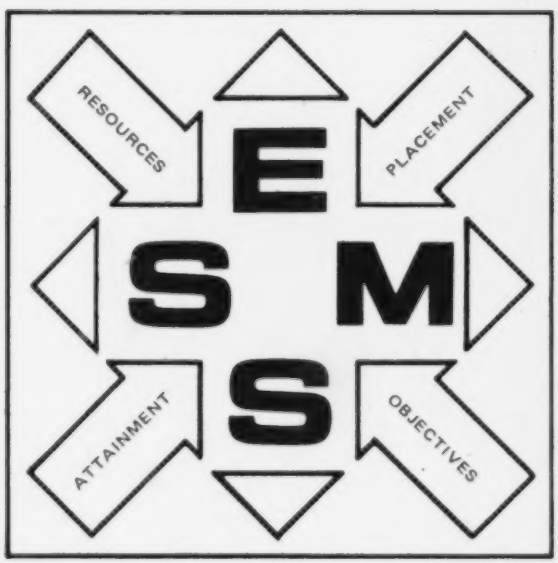
The first volume of an eight-part series (see EC 050 206 through EC 050 212) describes a task-based management system for special education programs which attempts to provide tools for the following activities: determining individual learner objectives, calculating manpower required to attain individual learner objectives, specifying manpower needs in terms of tasks and responsibilities, and evaluating staff performance in terms of attainment of learner objectives. Components of the management system which are treated in depth in later volumes, such as an extensive listing of behavioral characteristics and a visual display of 700 special education tasks grouped into 20 functions, are discussed briefly. Examined are features of the task-based management system relating to staff loading, manpower requirements, skill requirements and inservice training, cooperative decision making, program and staff evaluation, resource allocation, and program budgeting and accounting. The system is described as an educational communication system based on management techniques tied directly to pupil needs through staff responsibilities and tasks. The system is intended to lead to program and administrative accountability. (GW)

A GUIDE FOR THE MANAGEMENT OF SPECIAL EDUCATION PROGRAMS

MENTALLY AND BEHAVIORALLY EXCEPTIONAL CHILDREN

Project Number 44-00000-0000-925
EHA TITLE VI B

ED 070212



SPECIAL EDUCATION MANAGEMENT SYSTEM

1.0 A PROGRAM MANAGEMENT SYSTE

EC 050 205E

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Project Director and Director of Programs for Exceptional Children and Adults and Pupil Personnel Services

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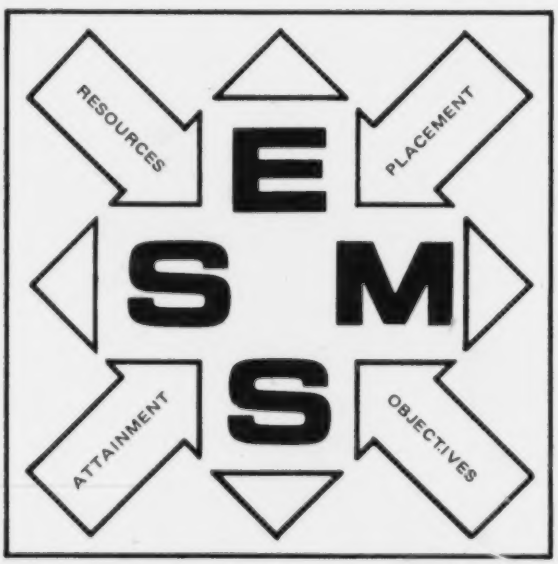

SPECIAL EDUCATION MANAGEMENT SYSTEM

1.0 A PROGRAM MANAGEMENT SYSTEM

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FOREWORD

Public education has been subjected to increased scrutiny, debate, and criticism over the years. There have been expressions of concern over the school system's inability to provide those benefits of special or general education that parents, taxpayers, and legislators expect from those who manage the "system".

As an educator and administrator, I commend this document to those in the educational community who are dedicated to improving the effectiveness of education. While this Guide applies most directly to special education, the management tools described in the text and charts have universal application. This Guide outlines an educational communication system based on management techniques tied directly to pupil needs through staff responsibilities and tasks. It can lead to program and administrative accountability as yet unknown in education.

The efforts of Dr. Wilson Riles and his staff have enabled us to move forward with this project. I am personally pleased to have the opportunity to utilize the services of VORT Corporation in this endeavor.

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DR. RICHARD R. FICKEL, Superintendent
Santa Cruz County Office of Education

PREFACE

In the EHA Title VI-B project proposal, which led to the publication of this Guide, the statement was made that "there is no available pool of information to assist parents, educators, legislators, and others in determining 'organizational or pupil performance accountability' for special education programs in the state." This statement is not intended to indict the educational community or to serve the frustrations of parents and legislators. It was intended to form the basis for a complete reappraisal and reordering of our educational goals based upon clearly defined behavioral objectives for exceptional children and adults. The statement is also meant to suggest the need to implement the evaluation of instructional programs and staff as provided for in California Education Code Sections 13485-13489 (Stull). Once the behavioral objectives are established, they can provide for the construction of a workable management system. The tasks or decisions required to bring about each pupil's individualized learner objectives can then be clearly defined and accomplished. All management systems are constructed to serve a consumer or to give direction for the processing or delivery of a product. We are proposing that this Guide and its supplements will allow us to do this for the educational community's product: the educated child.

RICHARD D. STRUCK, Director
Programs for Exceptional Children
& Adults & Pupil Personnel Services
Santa Cruz County Office of Education

ACKNOWLEDGMENTS

The project staff would like to thank Richard D. Struck, Director of Programs for Exceptional Children and Adults and Pupil Personnel Services, Santa Cruz County Office of Education, for directing this project and providing invaluable guidance.

To facilitate broad-based, statewide participation in the development of the project's products, an Advisory Committee was appointed. This committee met seven times throughout the project's two years and was instrumental in defining the scope and design of the project. Members of the Advisory Committee were:

Thomas Ball, Ph.D.
Research Psychologist
Pacific State Hospital

Dale Carter
Analyst
Arthur Bolton Associates

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San Juan Unified
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Willfred Schmidt, Ph.D.
Parent, San Juan Unified
School District

David Wright, Ed.D.
Director of Exceptional
Child Services
San Diego County Schools

During the two years of the project, two audits required by Title VI-B EHA were conducted in February, 1971 and April, 1972 along with an interim product evaluation held in August, 1971. The audit team members also served on the interim evaluation team and provided essential and critical insight and information to the project. These team members were especially helpful in providing trial field

responses and analyses of the products developed by the project. The following individuals participated on these teams (A1 = first audit; A2 = second audit; E = interim product evaluation):

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State Department of Education

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East Whittier City School District

Larry Schram (A1, A2, E)
Coordinator, Mentally Retarded
Sonoma County Department
of Education

Additional information for development of the management system was gained through a task analysis from participating programs. Over 180 staff members from the following special education programs provided essential task data (see Appendix 8.3 for task analysis participants):

- Los Angeles City Unified Schools, Special Education Branch
- Pajaro Valley Unified School District, Special Services
- Santa Cruz County Office of Education, Programs for Exceptional Children

A preliminary task analysis was performed in more than 25 classrooms. These programs and classroom staff are identified in Appendix 8.5.

Numerous school districts and programs participated in the development and field testing of the Behavioral Characteristics Progression (BCP) which relates the management system to the exceptional child. A total of 175 staff members from the participating programs provided crucial feedback on the relevance, use, and format of the BCP. These individuals are identified in Appendix 8.6 and represented the following school districts and programs:

- Fairview State Hospital School (Emotional Adjustment Population)
- Fresno County.(DCHM and TMR programs)
- Morgan Hill Unified School District (regular classes)
- Mt. Diablo School District (EH class)
- Pajaro Valley Unified School District (EH and regular classes)
- Sacramento Children's Home (EH class)
- San Juan Unified School District (DCHM and TMR classes)
- Santa Clara County (DCHM classes)
- Santa Cruz County (DCHM and MDM classes)
- Zonta Childrens' Center, San Jose (emotionally disturbed class)

We extend our grateful appreciation to the individuals in these programs who offered information essential to the development of this special education management system.

VORT Corporation

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COMPONENT 1.0 - A PROGRAM MANAGEMENT SYSTEM

This component describes the direction, definition, and development of the project's management system and its related tools. Considerations made by the special educator regarding the management of his program, such as staff loading, in-service training, resource allocation, etc., are also presented.

COMPONENT 2.0 - PROCEDURES FOR USE OF THE TASK BASE COMPOSITE

This component offers detailed procedures for use of the Task Base Composite (TBC) in program definition and development, task identification, responsibility assignments, staff loading, development of job descriptions and resource allocation. Several worksheets are attached to aid in TBC use.

COMPONENT 3.0 - TASK DATA TABLES

This component provides field gathered data in the form of summary tables to aid the user of the TBC procedures.

COMPONENT 4.0 - THE BEHAVIORAL CHARACTERISTICS PROGRESSION

This component describes the need for and development of the Behavioral Characteristics Progression (BCP), including field test results and design considerations.

COMPONENT 5.0 - PROCEDURES FOR USE OF THE BEHAVIORAL CHARACTERISTICS PROGRESSION

This component offers detailed procedures for use of the Behavioral Characteristics Progression (BCP) and specifies preparation, observation and recording, charting and objectives determination techniques. Several worksheets are attached to aid in BCP use.

COMPONENT 6.0 - BEHAVIORAL CHARACTERISTICS PROGRESSION BOOKLET

This component presents BCP content in booklet form to assist in the observation and recording phase of the BCP procedures.

COMPONENT 7.0 - THE PROJECT

This component presents the goals and objectives of the project, evaluation techniques employed and project recommendations and conclusions.

COMPONENT 8.0 - APPENDIX

This component presents definitions of terms, TBC and BCP participants and consultants, a discussion of labeling and the exceptional child, and bibliographic material.

COMPONENT 1.0

A PROGRAM MANAGEMENT SYSTEM

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1.1 PROJECT PHILOSOPHY

Special education must know where it is, where it is going, what must be done to get there, and how to best make use of its resources. A management system*, through the use of its tools, should identify where the pupil is and where he should be (learner objective); identify the tasks necessary to attain the learner objective; select the methods to accomplish these tasks; and identify the resources necessary for the methods.

The program manager should be to his program staff much as a teacher is to his pupils. The classroom teacher needs to know where the pupil is and where he should be before developing a lesson plan and identifying appropriate methods and resources. This same process should be used by the program manager. He must know where the program is, where it should be, and know the tasks, methods and resources necessary to attain an objective. Variables such as levels of communication and motivation, goal changes, starting points that differ with the existing attainment levels of each pupil, and resource availability confront the program manager as well as the classroom teacher. The object of a management system is to provide a set of guidelines to define these variables and to assist programs in educating pupils.

1.2 THE NEEDS OF SPECIAL EDUCATION - QUESTIONNAIRE RESULTS

A need* can be defined as a lack of something required by an individual or group of individuals. A solution* can be defined as an answer to a problem or a fulfillment of a need. Through research and

*Definitions of these terms are found in Appendix 8-1 at the back of this document.

field consultation, the project staff learned that one of the major needs of special education is to eliminate or remedy deficiencies in a coordinated manner. This document and its tools offer a system which can coordinate the delivery of education's major product, the educated child.

To find out whether special educators consider the need dealt with by this project to be important, the project sent questionnaires to educators throughout the State. The questionnaire was to assist the project to:

- Find out how special educators feel about the needs of their profession.
- Find out how they think the needs should be solved.
- Find out if management and the defining of tasks* is thought to be vital in meeting needs.
- Find out how educators feel about the role of tasks in a comprehensive management system.

Of the 225 questionnaire recipients, 152 responded; and from their responses, the following priority of needs was determined:

Priority	Area of Need
1	Curriculum development
2	Teacher training
3	Pupil assessment procedures
4	Improved staff motivation
5	Curriculum of teachers' colleges
6	Parental involvement
7	Improved staff performance
8	Identification of budget priorities
9	Administrator training
10	Dissemination of research

Also, the questionnaires showed 72% of the respondents thought there was a need to evaluate staff members on their actual performance on tasks outlined in job descriptions.* Job descriptions also should make note of workloads, assignments, training and motivation possibilities.

The project staff realized the necessity to develop an adaptable management system that could fulfill all of the above needs and provide the special educator with assistance in defining staff tasks.

1.3 THE NEEDS OF SPECIAL EDUCATION - RESEARCH AND FIELD CONSULTATION RESULTS

The following deficiencies were identified from research and field discussions:

- The field has difficulty defining the purpose or the basis for developing job descriptions.
- The field has difficulty producing and using job descriptions to support the staff responsible for providing education.
- The field views job descriptions mainly as a method of personnel evaluation*, whereas job descriptions may be used to improve motivation and training, as well as providing a means of measuring performance.
- The field has little time available to study and implement a detailed set of guidelines and workable specifications. This was indicated by the small number of respondents who had the time available to answer a second questionnaire.

In addition to the needs discussed in 1.2, the project staff thought an adaptable management system needed a method for developing and implementing job descriptions which could be used for motivation as well as measurement of performance. Realizing the minimal staff time available in the field, the project staff also dealt with the task of making the management system realistic in the amount of time required to put

it in use. For this reason, specific tools would have to be developed which could minimize the time required to implement the management system.

1.4 PROJECT'S RESPONSE TO NEEDS OF SPECIAL EDUCATION

From the needs determined through questionnaire, research, and field consultations, the project objectives were updated to include development of:

- A process* to assess a pupil's* present level of development and to determine individual learner objectives.*
- A process to calculate the manpower required to bring about the attainment of individual learner objectives.
- A process to spell out manpower needs in terms of tasks and responsibilities. Such a process would allow cooperation of staff and administration in the development of non-threatening job descriptions to minimize confusion and redundancy and improve communication.
- A process to make in-service training* procedures conform to staff job descriptions so that training can be tailored to the skill requirements of the job.
- A process to relate college curriculum and credentialing procedures to the skills required for a position according to individual job descriptions.
- A process to identify program activities to improve administrative planning and supporting staff tasks.
- A process to associate staff tasks directly with the attainment of learner objectives.
- A process to evaluate staff performance in terms of learner objectives attainment.
- A process to ensure that all program tasks necessary for the attainment of learner objectives are assigned or that cost versus benefit decisions are made.

- A process to manage special education programs that is positive and involves staff-administration cooperation and which takes into consideration the time requirements of staff tasks.
- A process to continuously update the above processes so they adapt to the changing needs of the pupils and the staff.

1.5 GOALS AND OBJECTIVES

Often there is confusion between goals and objectives. A great deal of effort has been expended in defining socially appropriate goals for exceptional children. Goals* are, by definition, statements of broad direction or intent which are general and timeless and are not concerned with a particular achievement within a specified time period. Objectives* are accomplishments that can be verified within a given time and under definite conditions. Objectives, if attained, advance the system toward a corresponding goal.

1.6 DESCRIPTION OF THE BEHAVIORAL CHARACTERISTICS PROGRESSION (BCP)

To assist special education in defining the goals and objectives of the exceptional pupil in measurable terms, this project has developed the Behavioral Characteristics Progression* (BCP) as the basis for the management system. The BCP is described in detail in Components 4.0, 5.0 and 6.0 of this document. The Behavioral Characteristics Progression is an extensive listing of behavioral characteristics* which can serve both as an indication of the pupil's existing behaviors (what is) and as an

indication of realistic objectives for him (where the pupil could or should be). The BCP provides learner objectives from which specific educational tasks can be identified.

1.7 THE PRIME AND NON-PRIME LINE CONCEPT

By using the BCP to describe the pupil's objectives, educational tasks necessary to sustain pupil progress can be identified. These educational tasks are labeled Prime tasks* if they directly involve the pupil with the educator, teacher, parent, etc., and Non-Prime tasks* if they do not involve the pupil, but support Prime tasks. By arraying tasks which are necessary for the attainment of the objectives of the pupil, the process of education can be illustrated. Prime tasks are arranged on the Prime Line* of education and Non-Prime tasks on the Non-Prime line*.

Ultimately, this Prime, Non-Prime concept could be extended to all levels of programs serving the exceptional pupil: the functions of the State Department of Education, county offices, the Department of Welfare, etc., can be related by task definition, directly (Prime) or indirectly (Non-Prime) to tasks involving the pupil. Such a concept can bring into the spotlight those persons or agencies involved in special education so as to identify the unnecessary activities which often accompany program operation.

The Prime, Non-Prime concept of education can improve coordination and communication, since knowing the pupil's behavioral characteristics, his learner objectives, and the tasks necessary to attain these objectives are the basis for communication. An understandable format using a common jargon is the means for communication. The Behavioral Characteristics Progression (BCP) and the Task Base Composite (TBC) are the communication media offered by the project.

Program tasks organized into Prime and Non-Prime groupings form what is called the Task Base Composite*. This composite is the result of reducing 25,000 tasks from three special education programs (Santa Cruz County, Pajaro Valley Unified, and Los Angeles City) into a rudimentary process of education. The Task Base Composite is a description of what is and a prelude to what should be. The TBC illustrates the process of special education so its weak points can be identified and remedied, and its strong points identified and encouraged. Thus, it provides a vehicle for determining and bringing about what should be. In this way, the TBC and associated procedures extend program management and planning.

1.8 DESCRIPTION OF THE TASK BASE COMPOSITE (TBC)

The Task Base Composite is a visual display of 700 special education tasks grouped into twenty functions* (e.g., Personnel Management, Instruction and Supervision, etc.). The seven umbrella functions* (Numbers 100-106), which appear in an upside-down "U" at the top of the chart, support the general program. The thirteen process sequenced functions* (Numbers 1-13), which are arrayed in a winding format below, support the pupil. Each task in the process sequenced functions is designated as either a Prime task and placed on the Prime-line side of the process or as a Non-Prime task and placed on the Non-Prime line side of the process. Many of the tasks displayed in sequence may occur at the same time. This is especially true of those tasks in Guidance and Counseling, Health, Therapy, and Instruction and Supervision, Functions 6, 7, 8 and 9, respectively.

Tasks are displayed in this sequence format primarily in order to suggest the start-to-finish process involved in educating an exceptional pupil. Due to the complexity of the educational process and the limited scope of this project, it was not possible to graphically display all the aspects of the educational system. The linear format of the TBC was selected to improve its usability and adaptability, not to imply that education is a linear process.

The Task Base Composite indicates a large portion of the tasks necessary to identify, diagnose, instruct, and evaluate the exceptional pupil. The tasks of a given special education program may not always mesh with those offered on the TBC chart in terms of sequence and/or level of definition. Since the TBC is intended to help identify program tasks, it is expected that tasks on the chart will be edited, added and deleted.

The TBC provides a basis for planning methods or materials to do a task and a means by which new or additional tasks can be analyzed. It also provides a way of measuring the impact of those tasks on the pupil as recorded on the Behavioral Characteristics Progression. The TBC can also be used to analyze the thoroughness, relevance and program impact of new legislation. Because of the present lack of an efficient management system and associated tools, educators have often found it difficult to implement mandated program procedures. Using this task-based management system, programs and tasks within a program can be analyzed to determine their respective educational benefit(s). The TBC helps educators answer the question, "Why are we doing what we are doing and how will it affect the pupil we serve?"

1.9 TASK BASE COMPOSITE DEVELOPMENT

The Task Base Composite (TBC) was developed using Task Description Forms (TDF)*, designed by VORT Corporation, to elicit detailed information from program staff members. The TDF form appears below. The recorded information included the specific tasks the staff members performed in their positions.

The decision to use a form such as the TDF to gather information resulted from discussions with and presentations to administrators, teachers, and support personnel. They felt that their jobs were too complex to be analyzed by anyone who was not aware of the intent of their actions. They also felt that typical

time and motion studies provided a very sterile approach and would not reveal the interactions, detail, intent, or time required to perform educationally relevant tasks. More importantly, however, by allowing the program personnel to record their own information, a participative approach was used. This method allowed the staff to see what they were doing daily, which for some staff proved to be informative. It also provided the staff with some confidence that the information used to eventually develop job descriptions would be based upon accurate, real data.

The participants included 130 teachers and 50 administrators and support personnel from Santa Cruz County, Pajaro Valley Unified, and Los Angeles City Unified Schools. Each person averaged 25 TDF cards per day and accounted for about 6 hours of his time per day for the three-week sample period. A total of 25,000 TDF cards were collected. The sample periods ranged from October, 1971 to March, 1972, depending on the school district. For this reason, a bias was inherent in the sample results. The sample did not include beginning and end-of-the-year activities or pre-holiday activities. To partially compensate for this, the participants were asked to record any tasks that were omitted because they did not occur during the sample period.

Approximately 150 man-days were used planning for the use of, summarizing, analyzing, and evaluating the TDF cards. The information was sorted according to task specifics as illustrated in the sample TDF below and then again as to whether the tasks were Prime (pupil related) or Non-Prime (support). The tasks were sorted according to and ordered within functions (e.g., Case Finding, Counseling, Instruction and Supervision, etc.) where possible. The result was a sequenced set of tasks by function as displayed on the TBC chart. Because of the need to generalize the data for use in other districts throughout the State, information such as location, date, source, and resources was not used in the Task Base Composite content. However, all of the summarized statistical data, in the form of data tables, can be reviewed in Component 3.0. Please note that the data are approximate and are to be used only as a guide. The times are given in average and median figures.

DO NOT USE THIS SPACE	TASK DESCRIPTION FORM (TDF)	© VORT CORP. 1971 (5)

No.	Date:	Location: _____ Contact: _____	Source: ☐ Self ☐ Assigned

Check others directly involved in task:

☐ Nurse	☐ Head Teacher	☐ Pupil	☐ Teacher
☐ Instructional Aide	☐ Psychologist	☐ Building Principal	☐ Bus Driver
☐ Counselor	☐ Coordinator/Director	☐ Resource Teacher	☐ Social Worker
☐ Parent	☐ Other _____	☐ Speech Therapist	☐ Secretary

Check functions to which task relates:

☐ Case Finding	☐ Referral/Placement	☐ Direct Instruction	☐ Evaluation
☐ Pupil Observation	☐ Guidance/Therapy	☐ Transportation	☐ In-service
☐ Diagnosis/Testing	☐ Instructional Support	☐ Budget	☐ _____
		☐ Schedule	☐ _____

TASK SPECIFICS: Purpose/Resources Used/Outcome. (use backside if necessary)

TIME REQUIRED
Hours : Minutes
_____ : _____

After the information was sorted, it was returned to all participants for corrections, additions, deletions, and clarification. This was done as part of the participative approach used by the project staff to elicit information. It also provided the staff with preliminary summaries of their own contribution to the project and a partial assurance that their information would be used.

Having collected, sorted and analyzed the data, certain decisions had to be made to determine how to display this information on the TBC so that it could be used by school district personnel. Some of the design considerations were:

- Ease of usage
- Practicality of information

- Level of usage (i.e., who would use the information)
- Time requirements
- Wording of tasks (i.e., were they observable and could staff agree upon their meaning)
- Format appeal

The TBC chart is the result of the above considerations and the compilation of the gathered data.

Although the BCP already has been field tested (See Component 4.0 for a description of this testing), field testing the TBC and the management system documents remains to be done during the third year of this project. As with the BCP, the content and sequence of the TBC will be updated as relevant information from the field is analyzed. For detailed information on the field test strategy to be used, see the Title III proposal (Component 7.3 and 7.5).

1.10 THE TASK BASED MANAGEMENT SYSTEM AND THE STULL BILL

The Stull Bill* requires that educational personnel be evaluated on the performance of their jobs according to the degree to which pupils have attained their learner objectives. While the project document was not specifically designed to meet the requirements of the Stull Bill, there is much similarity between what the Bill requires and what the Task Base Composite and Behavioral Characteristics Progression provide. The concept of educational accountability has created an emphasis upon the cost of attaining objectives. However, the project staff could locate no practical system of defining tasks in terms of objectives. This has resulted in educators having to attain objectives without having the ability to identify tasks necessary for their attainment. It has been difficult for educators to determine adequately the cost of gaining any one objective without this respective task(s) information. However, if cost can be

attributed to resources required per task and if tasks can be related to the appropriate learner objective(s), then the cost of an objective can be measured against the resultant pupil progress.* The Task Base Composite assists in this cost breakdown by providing the required definition of tasks.

The California State guidelines for implementing the Stull Bill state that, "generalized job descriptions should be formulated for all certificated personnel positions." The job descriptions which are to result from the Stull Bill are to relate directly to measurable pupil progress. A well-designed management system should not only indicate tasks to be accomplished but also how to determine appropriate tasks for a given position. The Task Base Composite and related procedures suggest how to accomplish this in a flexible and participative manner.

1.11 IMPLEMENTATION OF THE TASK BASED MANAGEMENT SYSTEM

The Task Base Composite is a guide or point of departure for use by program administrators and staff to identify program tasks related to learner objectives as demonstrated on the Behavioral Characteristics Progression. The TBC was developed primarily as a program management planning tool. In order that the TBC serves the functions for which it was designed, the following training suggestions should be considered carefully:

1.11.1 Workshops be held to inform participants of the management system concepts and the requirements for its use.

1.11.2 Programs be selected from the workshop participants to determine the willingness of their Boards of Education to make in-kind (time) and financial contributions.

1.11.3 A task outline be prepared, which specifies program tasks for continued use of the TBC.

This task outline should specify time required per task and provide program personnel with the necessary time for participation.

1.11.4 Program staff be assigned the appropriate responsibilities for implementation. It is suggested that the first two months of implementation be simulated to determine how realistic the implementation staff requirements are.

1.11.5 A final implementation time line be negotiated with the program staff based upon determination of revised staff responsibilities, skills, and time loading.

1.11.6 A priority for the implementation be established so that unscheduled interruptions can be minimized.

1.11.7 A continual analysis be conducted of the time line and the cost of delays in terms of management and staff time.

1.11.8 Target and control groups* may be selected to which pre-tests and post-tests* can be administered. It is suggested that these sample groups be small due to the detailed analysis required.

1.12 PROBLEMS IN MANAGEMENT SYSTEM IMPLEMENTATION

To implement the management system developed by this project, programs might find it necessary first to overcome the following hurdles:

1.12.1 Program policies and procedures which would hinder adoption of new methods of management, budgeting, and employment practices.

1.12.2 The lack of understanding by some in the educational community of the relation between the final produc. (the educated pupil) and staff job responsibility.

1.12.3 The difficulty of accurate prediction of manpower requirements.

1.12.4 The negative attitude of some educators toward methods of identifying pupil needs if those methods appear to be procedural or performance oriented.

1.12.5 The tendency of legislators and parents to see the need for change while failing to provide education with support tools and time to effect this change. There is often a discrepancy between what is advocated or ordered and what is provided at the program level to educate the pupil.

1.12.6 Management systems which do not provide for cooperation of the staff with the administration in arriving at decisions.

1.12.7 Unrealistic staff task loads and poor management of staff time, which allow little planning and result in off-hand decisions rather than those most necessary to the education of the pupil.

1.12.8 Confusion of staff responsibilities due to the lack of job titles being correlated with job descriptions.

This document, its charts and procedures are intended to be used by all individuals concerned with special education. This will apply to parents, professional groups and organizations, supporting groups, and the community. Obviously, specifics for each program and community are not offered in the Task Base Composite so the TBC chart may be adaptable to many special education programs.

Each administrator who uses the TBC will decide for himself whether it suits the needs of ongoing program accounting, manpower planning, personnel procedures and program policies. The detailed steps to be followed in using the Task Base Composite are provided in Component 2.0 of this document.

1.13 PROGRAM IMPLEMENTATION

Implementing any program is a complex process. It usually requires extensive planning and training of personnel. However, many organizations spend a large proportion of their time determining what the program is to be and a small proportion in planning and in training the staff.

The personnel involved in a new program and in many established programs are provided with general program goals and non-operational objectives to assist them in carrying out their duties. Non-operational objectives* give little hint as to a means of their accomplishment. They state that the program will produce an end result (e.g., a specific change in pupil behavior) but do not state how or by whom these results are to be attained.

Confusion and inefficiency often result when specific detail is not available to program personnel concerning what objectives they are to attain as well as suggested ways in which they may (or are expected to) accomplish those objectives. If both of these areas are not specified, the resulting program content may not be that which is desired.

The Task Base Composite (TBC) can guide a program designer and administrator in providing the program staff with the information it needs to implement a program in the manner intended by its designer(s). Providing this information has some interesting side benefits. Numerous studies show that the clearer definition of his job a staff member is given, the greater the possibility he will meet his supervisor's expectations. The increased social reinforcement or reward received from the supervisor results in a more satisfied and efficient staff member. To paraphrase this, the better defined job responsibilities are, the greater the increase in motivation and program efficiency. Factors which increase motivation and efficiency are, of course, very complex to determine. It is generally accepted, however, that well-defined staff performance expectations can improve communication between staff and administration.

1.14 STAFF LOADING AND MANPOWER REQUIREMENTS

When a program is being reviewed, the TBC provides certain aids to the administrator which can help him define some of the specific tasks required to implement and operate the particular program. Additionally, the TBC provides a method for assigning these tasks to different personnel positions. It also provides a way to summarize these assignments to obtain an estimate of how much time per position (e.g., psychologist time) is required to operate that program (staff loading*).

After staff loading is determined, manpower requirements* can then be calculated. If it has been determined (Steps 36.0-40.0, Component 2.0) that approximately 700 hours per week of teacher time will be required to carry out the required teacher tasks of a given program, then approximately 18 teachers will be required (700 hrs/40 hrs per week/teacher). If this procedure is followed for every staff loading estimate, an estimate of manpower requirements is obtained for the entire program (e.g., 2 administrators, 18 teachers, 3 psychologists, 4 speech therapists, 2 aides, 1 nurse, 3 bus drivers, 2 janitors, 2 secretaries). See Component 2.0 for detailed procedures on staff loading and manpower requirements.

1.15 SKILLS REQUIREMENTS AND IN-SERVICE TRAINING

The TBC provides the administrator with a basis for determining the types of skills required for each personnel position. If staff position A has been assigned tasks 1-1000, then a staff member filling that position must possess the skills to carry out those tasks. The specific skills required should be decided upon by the administrators and designers of the program after task allocation is completed. After needed skills have been identified, present staff and/or new applicant skills can be analyzed. From a comparison of needed versus available skills, a basis for hiring and training is derived to assist the

administrator and the personnel department. If the skills required for the job are not possessed by either the new applicants or current staff, then in-service training and/or additional hiring in specific skill areas will be required. See Component 2.0 for detailed procedures.

Use of the TBC to define tasks and skills required of a given position can assist employees in planning. If a staff member decides he would like to be able to perform a given function, (e.g., counseling), then the TBC can be utilized to define those tasks required (for counseling) and the types of skills needed for each task. By comparing these skill requirements to the skills possessed by the staff member, a training prescription can be developed. The staff member can then be provided with in-service training, or directed to available academic sources.

In summary, the TBC as a process offers:

- A basis for developing a detailed job description for each position
- A description of tasks necessary to accomplish certain program objectives
- A basis for training staff members and communicating job expectations
- A method for determining manpower requirements for a given program
- A basis for considering task impact upon the pupil

1.16 COOPERATIVE DECISION MAKING

As mentioned above, clear job definitions may improve motivation and encourage communication. Cooperative use of the Task Base Composite by staff and administration can also increase staff motivation and communication. The TBC provides a basis for cooperative decision-making by offering to staff and administration information on which to base a mutual discussion of staff tasks. Again, research has

shown that participative management techniques can facilitate agreement between staff and supervisors by increasing the possibility of interaction and explanation of positions and concerns by each group. Further, if both groups are involved in the decisions concerning what must be done (the tasks) and who must do them (the positions), the probability of task accomplishment is greatly increased.

Implicit in staff agreement on who is responsible for doing which tasks, is the fact that the staff agrees with the goals of the program. If agreement on job responsibility is obtained, then the tasks probably represent the interests or skill areas of the staff that agreed to carry them out. Therefore, the chance for program success is increased.

1.17 PROGRAM AND STAFF EVALUATION

This document offers techniques for defining the tasks, skill levels and training, and the positions required to accomplish tasks necessary to implement and sustain a program. From this display, tasks for each position can be related to learner objectives according to specific program functions (e.g., Instruction and Supervision tasks for the classroom teacher position). As discussed in Section 1.7, the tasks are displayed in a Prime-line (pupil directly involved) or non-Prime-line (pupil not directly involved) fashion.

Staff objectives are developed from the TBC task descriptions by adding time and performance requirements to the task descriptions (See Steps 52.0 and 58.0, Component 2.0). From these staff objectives, a basis for measuring staff progress is obtained. Similarly, program progress may be evaluated by relating accomplishment of staff objectives (from the TBC) to accomplishment of pupil objectives (from the BCP). It is suggested that staff and administration cooperate in determining time and performance requirements to ensure agreement and realistic expectations.

Therefore, this document provides a method to evaluate pupil progress within a program (the BCP), to evaluate staff accomplishment (the TBC), and to evaluate program effectiveness (the TBC in conjunction with the BCP). This method, the task based management system, although not originally developed in conjunction with the Stull Bill, does satisfy the requirements of this bill. In a preliminary manner, it allows the administrator to design a program in terms of pupil progress and to relate that progress to specific staff tasks within the program. From identified program tasks and corresponding staff skills, the administrator can establish a positive evaluation process.

1.18 TASKS AND STAFF SKILLS

The completion of one task is often dependent upon completion of several related tasks. For example, the task, "administer diagnostic tests" (See TBC task No. 3.31) to all pupils within the first three months of program start, is dependent upon completion of a number of other tasks. These other tasks include "schedule and confirm cases for diagnosis/testing" (No. 3.08), "review testing procedures before use" (No. 3.21), "score tests and evaluations" (No. 3.32), etc. For each of these tasks, prerequisite skills are necessary. To schedule a test, for example, an individual must be able to place events in order within a time frame, establish guides for setting priorities, set up a schedule format, and be able to read, write, and add.

There is a difference between tasks and skills. Although the above-mentioned skill of establishing guides for setting priorities might be considered by some to be a task in itself, a task* is a unit of work or activity necessary to attain an objective and to be completed within a given time period. A skill* is a demonstrated aptitude or ability to accomplish a unit of work (task). Completion of a task, therefore, is dependent upon the possession of necessary skills. It is useful in education to identify the

basic skills which, in combination, give an individual a broad repertoire of task capabilities. The teacher, if skilled in scheduling methods, content analysis, report writing, task analysis, task sequencing, observation, etc., can apply these skills to different types of tasks ranging from class scheduling to test scheduling, from lesson plan preparation to parent conference preparation.

Staff in-service should consist of training in the skills necessary to complete tasks. The skills should be geared to the overall tasks required of the staff (e.g., skills required for testing), yet detailed enough so that the staff can apply the skills to specific tasks (e.g., "administer diagnostic tests," TBC No. 3.31). The need is to isolate and identify useful skills. Which skills are useful can be determined from the definition of tasks to be completed. The Task Base Composite offers many of the tasks of special educators.

The curriculum of teacher colleges should provide skills ranging from evaluation methods to planning, from scheduling systems to interpersonal relationships, from finance to communication. Such a curriculum must also offer instruction on how to adapt skills to varying task requirements. By training personnel in this manner, a highly specific but adaptable repertoire of skills is acquired by the prospective teacher.

By training at the skill level, teacher college curriculums can provide individuals with a greater potential for adaptability to different programs. Skills are one measure of human resources. A primary skill to be acquired from college or in-service should be task identification and management. A simple outline is offered below as a basis for refining tasks into skills:

- Identify the tasks related to the function (See TBC functions).
- Identify the specific activities involved in the tasks, such as lifting, line drawing, etc.
- Identify the specific operations required such as adding, spelling, reading, etc.

- Identify and define the social skills necessary for task completion such as being tolerant, patient, inquisitive, etc.
- Identify the required skills for coordination such as scheduling, communication, interpretation, etc.
- Set performance levels for the identified skills and characteristics, such as the maximum weight to lift, the level of arithmetic application, etc.
- Group the skills according to their applicability to tasks. Attempt to specify skills so that they are not specific to one task but can be applied to numerous tasks requiring that skill. For example, writing at a specified level applies to all tasks requiring documented correspondence.
- Relate the skills to the originally identified tasks. Determine training requirements necessary to apply these skills to different tasks.
- Determine the skills required of program staff. Relate these skills to appropriate job descriptions. Provide teachers' colleges with this information for future training.

1.19 RESOURCE ALLOCATION

A resource* is a reserve or potential source of supply or support. The basic resource of education is the human being. Other educational resources include facilities, materials and equipment, time, and money. A method of improving use of education's resources to complete tasks necessary for the attainment of program and learner objectives was presented in Section 1.18. Resource allocation*, the distribution of resources for areas in which they are needed, will be discussed in this section. Allocation of resources involves establishing priorities and making appropriate distributions based upon those priorities. This requires a determination of resources necessary per task and a method for identifying tasks in terms of

learner objectives. Priorities can be thought of in terms of the value of accomplishing a specific objective. The need of a pupil for help in a specific area and the level of needs of one program compared to other programs are some of the considerations which determine which tasks deserve resources.

The Task Base Composite is a representation of staff tasks leading to various learner objectives. Different objectives will require different sets of tasks. By selecting the appropriate tasks according to a defined objective (Step 7.0, Component 2.0), the sequence of these tasks becomes the basis for determining the priorities of resource allocation. Since program personnel are the major resource of education, using the TBC to define tasks and determine job descriptions becomes a way of making decisions on the distribution of resources. In addition, the TBC aids in determining what material resources are required to support staff tasks.

A primary concern of most school communities centers on providing and using available resources. While the apparent emphasis is on the "cost of educational benefit," the resultant emphasis is usually on "cost" alone. Annual educational expenditures within the U.S. exceed 30 billion dollars, and many citizens are beginning to feel that such massive expenditures should be reflected more clearly in observable results. By relating resources to tasks to objectives, the results of these expenditures can be made visible.

1.20 PROGRAM BUDGETING AND ACCOUNTING

Program budgeting* is a specific application of resource allocation. A budget* specifies the amount of money (which can be translated into material and human resources) available for or assigned to a particular program. A budget reflects established priorities. A budget, therefore, is the formal statement of resource allocation or distribution.

Accounting* is the recording, summarizing, analyzing, verifying and reporting of program income and expenditures in the budget. Accounting provides a continual picture of the status of the budget and whether priorities or resources need to be changed to meet specified objectives. Resource allocation, budgeting and accounting are all directly related to supporting tasks necessary to provide services to the exceptional child.

To obtain an accurate analysis of program cost related to pupil benefit, it is necessary to distribute, monitor, and control the resources consumed by the tasks necessary to accomplish objectives. The objective must be measurable, as with learner objectives on the BCP, and so should the consumption of resources per objective. This makes the task the basis of cost benefit analysis. By accounting for resources at the staff task level, budgets can be established which directly relate to pupil objectives attainment.

The requirements of the Stull Bill, as well as those of program budgeting and accounting, may be satisfied by using the TBC and the BCP to identify job tasks leading to measurable pupil progress.

1.21 RESOURCE ALLOCATION MODELS

In order for education to be accountable, the cost of benefit delivered to the pupil must be calculated. Much research and effort has been spent in developing program budgeting and accounting systems and models.

A successful system should be based upon the lowest common denominators of measurement: pupil benefit in terms of objectives and cost in terms of the tasks necessary to attain these objectives. If accurate measurement of benefit is only possible at the learner objective level, there are only two basic

models available for resource allocation--(1) cost the objective, or (2) cost the specific tasks leading to an objective. Both models provide cost information by identifying resource consumption. The difference lies in the level of detail used in defining that consumption.

With model (1), a cost is specified for an objective in terms of the estimated resources necessary for attainment of the objective. In this manner, no one set of methods or tasks is suggested or required. But, since tasks consume resources, neglecting to cost out the individual tasks causes the estimated cost per objective to represent estimated rather than actual data. Using model (2), a more advanced planning effort is required to identify the tasks, but the cost data produced while analyzing the tasks is more accurate and more closely represents the true cost of attaining the specified objective. The TBC acts as a basis for costing the specific tasks which lead to an objective.

By determining the manpower requirements for tasks associated with certain pupil objectives, the special educator can anticipate the impact of varying resource availability upon the completion of tasks and the attainment of planned objectives. This approach, coupled with detailed task definition, should serve as the basis for budgeting and educational resource allocation. The TBC and the BCP provide a program with basic information necessary for determining the resources necessary to achieve learner objectives. By changing resource availability and, therefore, task completion, educators can model programs and determine what objectives can be attained. Educators can then decide if a given amount of resources will provide for the attainment of the most desired objectives.